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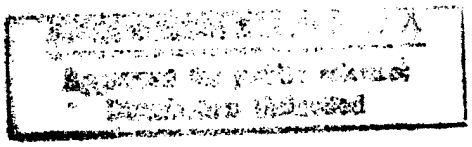

Worldwide Report

EPIDEMIOLOGY

No. 299

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HUMAN DISEASES

PLANT DISEASES AND INSECT PEST

'CLARIN' REPORTS ON CRISIS IN HOSPITAL STAFFING, EQUIPMENT

Buenos Aires Hospital Crisis

Buenos Aires CLARIN in Spanish 29 Aug 82 pp 20-21

[Text] The official reports are reduced to partial and dehumanizing statistics. The sick and the deceased are represented by numbers. There are several thousand sick and tens of dead. They are put into two columns, the factor 100 is established as a comparative index and later it is said that "it increased by only 5.4 percent," or "it is remaining within the normal parameters."

The medical reports are secret. The professionals diagnose, prescribe and observe the development of the illness and if they handle the process efficiently the sick person revives and returns home.

In ordinary events medical secrecy also extends to the "social cause." Because all of the patients die for pathological reasons. The lack of an antibiotic, a monitor that does not work, the absence of the anesthetist or the lack of money to continue treatment more and more often lead to "social death." The cause of some of these deaths, as occurs with the official statistics, appears on the generalized death certificate as "heart arrest."

The reports by the relatives of the deceased of an illness made worse are lost among the pain and the ignorance. That does not get through. No one attributes it to "social cause," but to an irrevocable and mystical fatalism.

In order to get to know part of this reality one must go out on the streets and survey the hospitals, in a wearisome inquiry that almost always ends in rejection by those who fear reprisals by their own colleagues.

Nevertheless, in spite of the statistics, of the iron-clad professional silence, of the resigned attitude of relatives, the "social death" is there. In a bed or in a coffin.

At this very moment hundreds of patients in greater Buenos Aires can be found suffering the most aberrant dehumanization.

Some, for the "nth" time, are waiting to be taken to the operating room; others receive treatment insufficient to cure their cancer, and others, tuberculous, are prescribed antifebriles to lower their fever.

To administer sedatives to "put the ward asleep," not to have a syringe for drawing blood, to take an injured person to another hospital because of a lack of supplies or to lack the minimum food items because the supplier is speculating on the periodic price increases are everyday realities, it was affirmed.

"And that is how it will be until someone out of professional shame and exercising real political power resolves that this evil of evils in the social organization should be treated more aggressively than the cancer itself. The real problem is the moral vacuum," concluded the doctor.

In Araoz Alfaro Hospital in Lanus they work only in the morning, "which is a scandal," commented a professional. There the number of emergency room physicians was reduced 50 percent and it is logical that if that was not sufficient before then now it is touching the limits of the absurd.

"The patients arrive at 6 a.m. and they do not know when they will leave, the infirmaries are overflowing and four rooms in the clinic are closed and necessary admissions are being turned down."

It was pointed out that since the hospitals become paid maintenance has become more bureaucratic. Among other nonsense, there is a shortage of syringes for injections or for extracting blood. "Therefore, one must await the auctions which occur only twice a year; there are days when there is not a single syringe in the entire hospital."

When the nurses or the doctors complain they are told that a part of the hospital supplies was sent to the Malvinas. "At times there is a shortage of bladder catheters, serum containing dextrose, bandages, gauze and sterilized material.

"In obstetrics there is a shortage of antibiotics, analgesics and anti-inflammatory drugs.

"In pediatrics there is a lack of basic supplies, from needles to incubators.

"There is neither a percussion pump for the newborn nor portable apparatus for x-rays. Fifteen incubators would be needed and there are only seven."

A nurse pointed out: "In the emergency room there are no compresses, forceps, none of the necessary scissors and neither is there a monitor for heart patients."

CLARIN was told that in the sectors for pathological anatomy there is a lack of everything from microscopes to the instruments for autopsies.

"We do not even have paper for writing down the medical histories," it was explained.

In the Ramon Carrillo Hospital in Ciudadela it was pointed out that in some cases the bidding bureaucracy causes a shortage of antispasmodics of up to 3 consecutive months, which means that in addition to the illness, there is avoidable pain, something inadmissible in a hospital.

"Also," it was revealed, "in hundreds of cases we make do with antibiotics that are not appropriate, making the germs more and more resistant and making the diseases impossible to treat effectively."

It was explained that in the emergency room there ought to be a monitor for patients who are admitted with cardio-respiratory arrests, as well as laryngoscopes and other items for urgent cases.

"A hemotherapist is indispensable for blood transfusions around the clock," but here too, there is none.

The emergency operating room is not used, because they cannot keep it sterile.

There are surprising revelations: "If a patient arrives at the emergency room with a cardio-respiratory arrest, he can die for lack of supplies." A physician said: "It is not possible to keep statistics on deaths in hospital centers that are caused by these deficiencies, but it is unquestionable that many patients, lamentably deceased, could have been saved if we had been able to count on adequate infrastructure and supplies."

Three physicians agreed to give to CLARIN some off-the-record statements on some aspects that they observe every day in Pedro Fiorito Hospital in Avellaneda.

"There is a total lack of supplies. We physicians are tied hand and foot, powerless in view of scenes that we cannot overcome merely through our professional will.

"There are no antibiotics for operations, no corticoids, in many cases there are no anesthetists, and there is no sanitary material, bandages, gauze, cotton....

"If a patient becomes critical and we need to operate there is always something missing to obstruct the whole thing. When there are antibiotics or serums, there are no corticoids; when we have corticoids there is no anesthetist; when the anesthetist comes we do not have the monitor. It is always that way.

"The only thing left to do is to take the patient to Ezeiza, La Plata, el Argerich or el Finocchieto.

"The hospital is full of patients and there is not even any medication for cardiology. Neither are there Foley catheters for those undergoing a prostate operation.

"There are no general-use antibiotics. The pharmacy is producing medicines, but there is a lack of containers for distributing them.

"The cots are obsolete, the ambulances are being scrapped and the only one that will start belongs to the cooperative."

According to one of the physicians, Pedro Fiorito Hospital has 340 beds; about 250 are occupied and almost 50 percent of the in-patients needs surgery for some reason.

"It is normal to take a patient to the operating room three or four times and have to return him to his bed because something failed and the operation could not proceed.

"Instead of staying 1 week, the average patient is in the hospital for 2 months.

"If he has relatives, we ask them to buy needles, antibiotics for the post-operative period, etc.

"The indigent are simply not operated on; they are sent home and...?"

Burn Victims Face Shortages

Buenos Aires CLARIN in Spanish 29 Aug 82 p 21

[Text] "In all of the area of Greater Buenos Aires there is not a single hospital having an adequate section and specialized personnel for handling serious burns.

"And worst of all, sending them to specialized centers in the federal capital is almost impossible, because these centers do not have the capacity to receive them."

A doctor from Posadas Hospital explained: "A patient with burns over 30 percent of his body comes to us and there are no beds anywhere in the capital or in the Burn Institute. Then they need a sterile bed and they do not exist either. They are put anywhere there is room, in nonsterile beds, which means certain infection.

"In the Burn Institute they have a large sterile bathtub for submerging the patients, where they change the bandages that have adhered to the wound.

"Here and in all the other hospitals in the greater urban areas, irremediably they tear away skin and other tissues along with the bandages and guaze.

"Amost all the time burn victims come to all the hospitals in Greater Buenos Aires and they have no place to send them. That is the case for a serious burn victim, who, 99 percent of the time becomes infected...and dies."

Buenos Aires Hospital Crisis

Buenos Aires CLARIN in Spanish 30 Aug 82 p 22

[Text] In most of the cases the professionals asked by CLARIN stated that some of the accounts were circumstantial, while others sought to delve deeper into the problem.

Among them they listed the low salaries for physicians and nurses, the age of the installations, the lack of coherent programs to eradicate inefficiency, and, in certain cases, the sense of defeat that was afflicting those who do not wish to accept the generalized degradation of medical practice.

In the new inquiry, as if it involved a table of uniform complaints to convince the chroniclers, there was a repetition of problems similar to those expressed to CLARIN yesterday.

Because of its location, the Alejandro Posadas Hospital covers an important part of the Buenos Aires metropolitan area.

There other types of deficiencies were noted.

The exiguous budget that it has for medication produces some dramatic situations: "Some of our patients are small children who need antibiotics and cannot get them.

"There are malnourished minors and adults who are becoming worse all the time."

Specific cases were cited: "Suspected tuberculous patients should receive a radiography, but there are no plates.

"Treatment by a diagnostician requires a large expense for drugs (which are not given away gratis), that the patient eats well, that he does not work and that he receives several months' rest."

The cure is, perhaps, simple, but who is in a financial position to be cured? That was the dramatic conclusion.

The hospital has neither radiotherapy nor anticancer drugs for cancer patients. "It is necessary to take the patients to a specialized institute and to the National Drug Bank."

A cancer patient needs, among other medication, five tablets a day of a corticoid (Oncovin, Deltisona, Metrotexate) and a small bottle with 10 units costs 100,000 pesos.

A hospital as important as Posadas has only two ambulances "and when there were more vehicles there were no drivers...."

And those close to the hospital stated that "the arrival of food to put together a diet is a lottery.

"Frequently we have no high-quality food item, such as meat, cheese or milk.

"At times a food item is out for bids, but it is not delivered because the slowness of the bureaucratic process causes the suppliers to prefer to pay the fine over delivering a shipment of food, whose cost has doubled during the bidding procedure."

A physician revealed that the patients arrive at 4 a.m. to ask for a number and they are attended to in the emergency room to decide on their expectations.

"In the emergency room," he said, "they are treated symtomatically and it is not unusual for a patient with tuberculosis or cancer to go home calmly with a syrup for his cought or an antifebrile for his fever."

It is affirmed that Finochietto Hospital, an important auxiliary center, has gone from being "a hospital for acute cases to a hospital for chronic cases.

"It is functioning at 50 percent of its capacity and a patient who could be released in a few days has to stay more than 1 month.

"Because of the lack of personnel, there are 80 unused beds in closed wards.

There is a shortage of everything in the medical clinic and in the entire hospital: Tensionometers, bedclothes, mattresses."

Because of the lack of technical and human material, an ordinary analysis may take up to 4 days.

As is the case in a number of other Buenos Aires hospitals, cancer is treated with conventional radiation therapy because of the lack of new equipment.

"There is no computerized tomography, the equipment for producing rays is of no value and as a result the treatments are not very effective. That affects the lives and survival rate of patients."

A physician reflected: "There is an attempt to work it out as best we can with the one thing that we do have. There is an abundance of will."

The surgeons are no better off: "We are lacking basic equipment, such as tomographs and ecographs used in making primary diagnoses."

Because of the lack of diagnostic means, a surgeon confided, at times the course of treatment chosen is wrong for the patient, and the last recourse of "opening him up to see what is going on" becomes the risky commonplace.

Intensive Therapy Lacking

Buenos Aires CLARIN in Spanish 30 Aug 82 p 22

[Text] There is no intensive therapy in Pedro Fiorito Municipal Hospital. The affirmation is inadmissible, even in today's Argentina.

A physical place has been reserved. And nothing more. When a critcally injured person, persons with serious trauma or patients in coma arrive at the place there is no other resource than to send the patient to another hospital. If he makes it through the trip he will survive. If not, he will die.

There is a working coronary unit in cardiology. But the hospital as a whole does not have intensive therapy.

"The seven beds that should be there are not; there are neither monitors nor respirators; there are no instruments for a dosage in the blood; there are no electrocardiographs, no laboratory, no....

"And now take note of the most incredible and absurd thing that can occur in a hospital: Dr Horacio Traverso was named chief of the service after a competitive examination, and he had to resign out of professional shame when he was not provided intensive therapy with specialized personnel, adequate beds and implements.

"Six months after winning the competition, and after 6 months of our demands for a functioning intensive therapy in Fiorito, we lost the only thing that we had gained: the chief of service."

Nurses Shortage Worsens Crisis

Buenos Aires CLARIN in Spanish 30 Aug 82 p 23

[Text] There were specific revelations in regard to the urgent problem of the lack of nurses and auxiliary personnel being suffered both by the hospitals mentioned previously, as well as the following hospitals: San Miguel, Moron, La Matanza, Luisa C. de Gandulfo, Lomas de Zamora and the municipal hospitals Tigre, General Sarmiento and Vicente Lopez.

"Nursing is an alarming disaster; with the 1,200,000 pesos that a nurse earns there are fewer every day.

"In practice a nighttime nurse serves 30 patients, and theoretically the 8 hours are not even enough time for her to give them their medicine."

A concerned physician indicated: "I think that at this time there are very few who are studying nursing. Most of the available personnel are nurses' aides lacking the knowledge to work with patients and not authorized to give injections or medication, although in practice they do that." That is a serious accusation on top of the critical revelations.

"They are humble people who lack instruction and it is not unusual for them to give an intravenous injection instead of an intramuscular, causing fatal accidents."

There is another frightening practice employed by the hospitals: "Most of the nurses have two jobs (the hospital and a private clinic) to put together a few pesos.

"In spite of the advertisements that guarantee a professional future and that indicate salaries commensurate with the responsibility, it is more and more problematical for the nurses to register for hospital courses of study.

"Most are convinced that the work load is very great and the salaries very low in the state hospitals.

"Some study because they have hopes of getting a job in the luxury sanatoriums, where the pay is higher, and others wish to graduate so that they can go abroad and earn hard currency.

"We prepare them and then they lose heart, they give up, they go abroad or they come to the hospital exhausted.

"It adds up to 16 or 18 hours, plus 3 or more in travel, so they hardly sleep. Then it is normal for the nurse on the night shift to fill a large syringe with Valium and give all of the patients an injection so that she can sleep in the office.

9746
CSO: 5400/2222

BRIEFS

DACCA TETANUS CASE--Doctors of the Dacca Medical College Hospital detected on Thursday that a patient Anis, 30, who was admitted to the hospital about 13 days ago with injuries developed tetanus and he was transferred to infectious disease hospital at Mohakhali. Anis was admitted to Dacca Medical College Hospital with head and leg injuries following road accident on September 3. The authorities immediately closed the Ward No. 31 for disinfection. [Dacca THE BANGLADESH OBSERVER in English 17 Sep 82 p 8]

CHOLERA IN CHITTAGONG--CHITTAGONG, Sept. 14--Twelve persons died of cholera and diarrhoeal diseases at Kutubdia island in last two weeks. According to delayed reports reaching here, the diseases broke out at Aliakbar Dail and Kojarbil Union and have been spreading fast in the area. When contacted an official of local Civil Surgeon Office admitted the fact of the diseases. There was acute scarcity of drinkiug water at the island following the recent flood which causes the disease. [Dacca THE NEW NATION in English 17 Sep 82 p 2]

CSO: 5400/7129

OFFICIALS TRACE CONTACTS OF CHOLERA CARRIER

Kuala Belait BORNEO BULLETIN in English 11 Sep 82 p 2

[Text]

BANDAR SERI BEGAWAN. — Brunei has been hit by its second cholera scare in recent weeks.

Health officials went into action after a Lawas man visiting Brunei was confirmed as a victim of the disease.

The carrier, Encik Moktal bin Haji Tengah, 46, from Kampung Awat Awat, is now recovering in Bandar Seri Begawan General Hospital.

He entered Brunei on Thursday last week with his wife, four children and two sisters, to visit relatives at Kampong Sianas (part of Kampong Ayer).

The family arrived about 2pm to attend a thanksgiving ceremony and he was taken ill three hours later.

Encik Moktal was admitted to hospital the following morning where tests confirmed he had cholera.

Brunei health officials notified the Sarawak health authorities and steps were taken immediately to prevent the disease spreading here.

The 14 members of the Brunei family who the man stayed with were quarantined at home and immunised against the disease.

Encik Moktal's wife and two of his children were also quarantined here — the others have returned to Sarawak.

Three neighbouring families in the kampong the infected man visited have been immunised and given antibiotic treatment.

Brunei's senior health officer, Dr P. Durayappah, said on Tuesday: "We have now traced all this man's contacts and there is no cause for alarm.

"Fortunately, he was not able to move about because of his illness and we have now taken all precautions to prevent this spreading."

At mid-week, there were no reports of new cases. The disease has an incubation period of a week.

Brunei is cholera free and has not had an outbreak for more than a decade — unlike Sarawak and Sabah which have been hit hard by epidemics.

On Monday, the Brunei Medical and Health Department warned the public on radio and television to eat only freshly cooked food and to drink boiled water.

The disease can be transmitted through food, drink and water.

The department also urged anybody who suffers vomitting and diarrhoea, the first symptons of cholera, to report to the nearest hospital immediately.

In July, the Brunei government completed its annual cholera immunisation campaign which involves health visits to every settlement in the state.

Shortly after the campaign ended, a full scale medical alert was mounted in Brunei when a confirmed carrier —also from Lawas — ended the state.

The 18-year-old youth spent a few hours in the capital but returned to Lawas when he heard a bulletin on Radio Malaysia telling him to report to the nearest hospital.

Health officials traced the man's movements to a family of 10 in the capital where he stayed for the whole of his visit.

CSO: 5400/8402

BRIEFS

SERIOUS HEALTH THREAT--Chad made an urgent appeal on 16 September to the regional committee of the World Health Organization [WHO] for Africa and requested the emergency sending of a special mission to become aware on the spot of the medical-health situation. This appeal was made on behalf of the Chadian Government by Dr Matchok Mahouri, commissioner for public health, chief of the Chadian delegation to the 32nd session of the regional committee, which was held in Libreville. Dr Mahouri stated in particular: "the health of mankind is seriously threatened in Chad." The normal public health channels have been virtually disorganized by the war. Hospital buildings have been destroyed for the most part and the medical staffs dispersed. Endemic diseases like tuberculosis, measles, cerebro-spinal meningitis, trpanosomiasis, malaria, diarrhoeal diseases are experiencing a recrudescence to the extent of the Balkanization of the infrastructure. [Brazzaville MWETI in French No 654, 21 Sep 82 p 7]

CSO: 5400/15

DISCOURAGING PROGRESS IN ANTIMALARIA CAMPAIGN TOLD

Lapses in Tamil Nadu

Calcutta THE STATESMAN in English 10 Sep 82 p 4

[Text] MADRAS, Sept. 9--The lapses and inadequacies in the execution of the Modified Plan of Operation (MPO) to control malaria was brought to light in the report of the Comptroller and Auditor-General for 1980-81, tabled in the Tamil Nadu Assembly.

There had been an increase in the incidence of malaria in the State even after the implementation of the MPO since April 1977. Under the programme, areas with an annual parastic index of two and above per 1,000 population were subjected to cyclic spray of insecticides, while those recording less than two were to have only focal spray around positive cases.

The report revealed that even in areas with the rate of incidence of more than 20 per thousand population were completely omitted from spraying. Deficiency in spray coverage ranged from 39 to 61%.

As a measure of active surveillance, the MPO provided for collection and analysis of blood smears from 10% of the total population. Cases found positive were to be administered radical treatmen within 10 days. But collection of blood smears fell short by 53 to 57%. There was also a delay ranging from one to three months in administering radical treatment and in 14 to 22% of positive cases, no treatment was given at all.

'THE HINDU' Editorial

Madras THE HINDU in English 9 Sep 82 p 8

[Text] THE WAR AGAINST malaria is becoming increasingly difficult to wage. Since 1965--when the incidence of malaria came down to one lakh cases against many lakhs in the preceding decades--there has been a resurgence. The causes for this (as listed by the Union Health Ministry) are the development of resistance by mosquitoes, which are the carriers, to certain insecticides, the ineffectiveness of chloroquine against malaria parasites in some parts of the country, the increase in the prices of insecticides and the inadequacy of funds for the malaria eradication programme. Of these, the fiscal constraint

is entirely remediable if a really serious attempt can be made to find the funds through the readjustment of plan allocations for the welfare budget. The Indian Council of Medical Research observed last June that "it was not possible to tackle the recrudescence of malaria as it had not been possible to control it any more with chemical insecticides alone." It was reported later that the Vector Control Research Centre at Pondicherry had successfully isolated and mass produced a bacterial agent which could kill mosquito larvae. Also, 14 research schemes (eight for operational and six for field research) are under way under the auspices of the ICMR and some more work on these lines is being done with the assistance of the World Health Organisation. In view of the pressing and vital need for preventive measures, close monitoring of the implementation of these projects is imperative.

Obviously, an immediate thing that must be done is the liquidation of the carriers. The Governments at the Centre and in the States are trying to imrpvoe the competence of mass spraying programmes (though there are reports of late about spraying machines being idle) aside from augmenting the number of depots which sell the popular drugs. But the pity of it is that these efforts get defeated by ecological degradation, especially in the urban areas. Madras is estimated to account for 60 per cent of the malaria cases in the State. This is on account of the deficiencies of the sewerage system and the consequent infection of the neighbourhoods by sullage. Some progress is no doubt being made to look for and control contamination of wells by subsoil effluents. However, for various reasons, slums which are among the main breeders as well as victims of the disease are on the increase in the teeth of the slum clearance programmes. This has made a mockery of the claims about people's participation in executing preventive measures through the high powered publicity campaign based on posters and other visuals and door to door conacts. It is certainly time that--as a matter of national priority--the fight against malaria was put on something resembling a war footing.

CSO: 5400/7125

EXPERTS DOWNPLAY REPORTS OF 'MYSTERY DISEASE' IN ASSAM

Bombay THE TIMES OF INDIA in English 13 Sep 82 p 23

[Text]

GAUHATI, September 12 (PTI). A FEAR psychosis among the people in the wake of reports of a mystery disease, 'tingling', has taken roots in parts of lower Assam and Meghalaya. But medical experts say that the disease, said to have spread from West Bengal, is purely imaginary.

Prof. R. N. Pathak and Dr. B. C. Kakati of the Gauhati Medical College, who investigated some cases in Goalpara district adjoining Kamrup, said that there were no 'abnormal findings' in the patients they examined. The patients reported tingling of the nerves and numbness of limbs in the lower parts.

The patients said they experienced a feeling of shrinkage in the genital parts. In some cases the patients were 'unconscious or semi-conscious'.

DEATH SCARE

On an average three to four persons in a day made a bee-line to the medical college hospital here complaining of the disease. The patient was in a extremely perturbed state of mind and scared of death.

Similar cases were reported from district and sub-divisional hospitals in Kamrup and Goalpara.

Prof. Pathak, and Dr. Kakati, specialists in medicine and neuro-surgery, are understood to have said in the report they submitted to the Assam government that in the cases they had investigated in Goalpara district, the patients were "in the grip of a fear complex" and there was no "disease process".

Prof. (Mrs.) Deepali Dutta, head of the psychiatry department of Gauhati Medical College, said a young patient, brought to her department in early August with symptoms akin to the 'tingling' disease, was diagnosed as a case of 'kuro', a rare culture-bond psychiatric disorder of neurotic type.

She said she had since heard of a good number of people suffering from the illness or revealing grave apprehension of contracting the disease.

'MALAYAN MALADY'

Prof. Dutta said the 'kuro' was often identified with the 'Malayan malady', an endemic disease prevalent in Malaysia affecting mostly the Cantonese sections.

She said that 'tingling', like all neurotic diseases, was born out of suggestion and as such was curable by counter-suggestion. The disease has "no connection with infectious agents like bacteria or virus in any form".

Prof. Dutta warned that 'kuro', however, was liable to spread, like any epidemic, if fanned by rumours. But by no account could 'tingling' be described as a dangerous disease.

She said 'tingling' was produced by a temporary effect. Proper first aid, mainly pouring water in limited quantities was enough to soothe the nerves.

Meanwhile the Assam government has asked the people not to spread alarm. They should report such cases to hospitals and medical practitioners.

'Tingling' was first reported from north Bengal and reportedly spread through the 'Siliguri neck' the narrow corridor leading to Assam and the north-eastern states through Goalpara and Kamrup districts of Assam.

Subsequently cases were also reported from areas in Nowgong and Darrang districts, the latter bordering Arunachal Pradesh and Bhutan. Cases were also reported from Meghalaya.

The psychiatry department of Gauhati Medical College has proposed to study in detail the appearance of the 'Malayan malady' in north-eastern India.

CSO: 5400/7127

BRIEFS

GASTROENTERITIS DEATHS--CHINSURAH, Sept. 7--Three people died of gastro-enteritis at Tulaphatak and Udaypally in the Chinsurah area last month. Dr Ranjit Mukherjee, Chief Medical Officer of Health, Hooghly, said here today. He said that 14 people had been affected by the disease in the area. The victims included a 60-year-old woman and a 3-year-old girl. Dr Mukherjee said that spread of the disease had been checked. The district medical officers had taken precautionary measures of disinfection, inoculation and vaccination. [Calcutta THE STATESMAN in English 8 Sep 82 p 16]

GASTROENTERITIS IN MIDNAPORE, Sept. 8--Fifteen people have died of gastro-enteritis in 200 villages of the 26 drought-hit blocks in the district so far. A few hundred, suffering from the disease, have been admitted to different hospitals, according to the District Health Department. The affected villages are in Gopiballaypur, Belda, Egra, Kespur and Sadar block areas. [Calcutta THE STATESMAN in English 9 Sep 82 p 4]

ENCEPHALITIS DEATHS--Encephalitis Kills 3: Encephalitis that had emerged as a "killer disease" in Burdwan district last year has claimed three lives at Naranpur village in Durgapur this year. The disease used to show signs of decline in the monsoon months, but this year it started during the rains. [Calcutta THE STATESMAN in English 13 Sep 82 p 9]

CSO: 5400/7126

BRIEFS

RABIES IN NORTH SUMATRA--The rabies epidemic caused by bites from animals, particularly mad dogs, is spreading in Pematangsiantar. DVM C. Sibuea, chief of the Pematangsiantar City Animal Husbandry Service, briefly stated that dozens of persons were victims of rabies in the past week but he did not clarify how many of them died for lack of treatment. The reoccurrence of the epidemic in the second largest city of North Sumatra, Sibeua said, was surprising because anti-rabies inoculations of domestic animals owned by local residents are administered periodically. The last inoculations were given in July. An investigation provisionally concluded that the majority of the rabies victims were bitten by dogs under 3 months of age who are not subject to inoculation. The outbreak of rabies cases is the second in North Sumatra since January when a similar outbreak occurred in Medan. A summary report of rabies victims notes that hundreds of persons develop rabies each year. In 1978, 1,477 cases were recorded of the disease resulting from animal bites. Victims find it difficult to locate anti-rabies vaccine. [Excerpt] [Jakarta MERDEKA in Indonesian 31 Aug 82 p 4] 6804

MEASLES IN BANDUND--Measles is one of the major causes of death in several areas of West Java. Its victims generally die of complications due to another illness called "bronchial penumonia." Without giving any figure for the number of deaths, Dr H. Sulaeman, chief of the Bandung City Health (DKK), explained that the disease was recorded as beginning in Bandung City some time ago. There were 56 cases in the last 6 months, but thus far there have been no deaths. This figure is based on reports received by public health centers. Those treated by doctors and in hospitals and private treatment clinics have not yet been recorded. Deaths generally occur in colder areas where victims are unable to receive treatment. In Bandung City, in particular, the DKK chief said, diseases which attack local residents are dengue fever, influenza, diarrhoea, malnutrition, allergies, and skin diseases. However this is no cause for concern since Bandung has sufficient health facilities. Bandung, he said has 32 public health centers, 11 general hospitals, 400 practicing doctors, more than 100 private treatment clinics, a number of pharmacies, and similar facilities. Environmental sanitation in Bandung, however, is poor and needs overall improvement. This view is derived from potable water data which indicates that only 26.8 percent of total requirements are met because the PDAM [potable water development project] has not yet been completed. The balance of water users must obtain their daily water needs from wells, the potability of which is debatable. [Excerpt] [Jakarta SINAR HARAPAN in Indonesian 21 Aug 82 p 3] 6804

GASTROENTERITIS IN WEST SUMATRA--Five residents of Simaligi, North Siberut Subdistrict, Mentawai Archipelago, West Sumatra, died of gastroenteritis which has reached epidemic proportions, Dr Firdaus Bahaudin, chief of the Disease Prevention Subservice, West Sumatra Department of Health, told SINAR HARAPAN on Friday [20 August]. The epidemic which attacked the remote village, located far in the interior of Mentawai, he said, occurred almost a month ago but because of the difficulty in communicating with the outside world, the news of the outbreak reached Padang only on 17 August. It is not yet known whether the epidemic has subsided because no further report has been received from Mentawai. Only a brief report of the epidemic was forwarded to Padang, with no mention of the number of victims. A more detailed report is awaited so that a medical team from Padang can take preventive measures. "Medications such as tetracyclin, oralit (sweet salts), and fluids for infusions have been readied," Dr Firdaus said. Communication between Muara Sikabaluan (the capital of North Siberut Subdistrict) and the village of Simaligi is very difficult. The village can only be reached first by river and then by foot through jungle and swamps. The outbreak of gastroenteritis in Simaligi, Mentawai, means that similar epidemics of gastroenteritis have broken out in the village a number of times causing many deaths, Dr Firdaus said. In 1974, gastroenteritis caused 100 deaths. It was very difficult then to take preventive measures and, therefore, several health officials were sent in by helicopter. In addition to poor communication, the attitude of the local residents hindered the medical team in providing treatment. The local residents ran away to avoid getting the disease when a family member died. This made it very difficult for the medical team to inoculate them. Gastroenteritis also broke out around Simaligi in 1979, with some 45 cases, several of whom died. [Text] [Jakarta SINAR HARAPAN in Indonesian 20 Aug 82 pp 1, 12] 6804

GASTROENTERITIS IN WEST KALIMANTAN--Dr Gunawan Hadibrata, chief of the Control, Eradication, and Guidance Sector of the West Kalimantan Department of Health Regional Office, said that as of 23 August, 467 cases of gastroenteritis were treated in hospitals and four persons died, of whom three were children and one was an adult. On Monday [23 August] 80 victims entered hospitals and public health centers. As of 20 August, 142 persons were recorded as having been admitted to hospitals. Most important, Dr Gunawan Hadibrata said, is the lack of sufficient potable water. If the weather does not change and no rain falls this week, the situation, of course, will be rather alarming. Meanwhile, the PAM [waterworks] side in Pontianak, also queried on Tuesday morning, stated that on 22 August the salt content of the Kapuas River varied between 433.6 and 1,431 miligrams per liter. The amount of salt in the water, the PAM side said, depends on how low the tide is. At present water for distribution to PAM customers is taken from the Landak River in Penepat Village. It is no longer possible for PAM to draw water from the Kapuas River because its salt content is more than 400 miligrams per liter. [Excerpts] [Jakarta SINAR HARAPAN in Indonesian 24 Aug 82 p 3] 6804

DENGUE FEVER IN PADANG--Mass spraying of 40,000 houses to prevent dengue fever will take place in Padang at the end of September and will involve 1,500 volunteers, Dr Firdaus Bahaudin, chief of the Disease Prevention Subservice of the West Sumatra Health Department, told SINAR HARAPAN recently. He said similar measures taken to date were effective in preventing the development

of an epidemic. However to provide better control, the effort will be expanded to include houses that were not sprayed earlier. Dengue fever which is caused by the bites of mosquitoes, began to spread in Padang in January. From January to the end of June, Dr Firdaus said, 200 victims were recorded as having received treatment, 11 of whom died. Twice as many victims of the disease were treated on an out-patient basis, he said. [Excerpt] [Jakarta SINAR HARAPAN in Indonesian 28 Aug 82 p 3] 6804

TYPHUS IN YOGYAKARTA AREA--In mid-August more than 50 residents of the Candibinangun Ward, Pakem Subdistrict, Sleman Regency, Special Region of Yogyakarta, were attacked by typhus, five of whom were diagnosed as positive by doctors. The Sleman Regency Public Relations Office explained that the disease which attacked the residents of Pakem was endemic rather than epidemic. Of the 50 cases recorded, 30 came from Cemoroharjo Hamlet and 20 came from Kemput. Not all of those taken to the hospital were hospitalized. They were treated as outpatients and given routine examinations. Eleven persons were hospitalized. Many residents of the two hamlets already use wells to obtain their drinking water but in general the residents of the villages do not use family outhouses. Further the farmers use animal manure to fertilize the fields so that during almost every planting season they are working in soil and manure. Tied in with the typhus outbreak, farmers are now asked to guard against scattering the manure used for fertilizer in inappropriate places. [Excerpts] [Jakarta SINAR HARAPAN in Indonesian 28 Aug 82 p 3] 6804

CSO: 5400/8401

RESISTANT STRAINS OF GONORRHEA

Tel Aviv HA'ARETZ in Hebrew 31 Aug 82 p 3

[Article: "Half of the Cases of Gonorrhea Are Caused by Penicillin-Resistant Bacteria"]

[Text] Half of the cases of gonorrhea are caused by a group of bacteria that are resistant to penicillin which is the usual treatment for the disease. This was determined in a new study by a team of doctors from the General Sick Fund. Dr Moshe Smilowitz, head of the team, reported that 258 cases of gonorrhea, caused by the gonococcus bacteria, were examined. In half of the cases strains of penicillin-resistant bacteria were discovered. This finding was unexpected because until 1980 cases of gonorrhea caused by these strains were rare. The surprising statistics, according to Dr Smilowitz, attest to the fact that since 1980 there has been an acceleration of the spread of gonorrhea from penicillin-resistant bacteria.

The research finding has far-reaching significance in terms of treatment. In every case of gonorrhea, it must be determined as soon as possible if the disease is caused by penicillin-resistant bacteria. In such a case treatment by other medications must begin immediately. Rapid treatment with the proper medication is important in order to prevent complications in the patient and in order to prevent the additional spread of the disease in the population.

The laboratory team of the Sick Fund in Haifa has developed an inexpensive and rapid method for determining within 1/2 hour if the gonococcus bacteria secrete an enzyme which neutralizes the action of the penicillin and causes the bacteria to be resistant to it.

5830
CSO: 5400/4747

REPORTS ON AREAS AFFLICTED BY GUINEA WORM

Disease Hits Koniboua

Abidjan FRATERNITE MATIN in French 14 Sep 82 p 8

[Article by P. M. Abialy: "Guinea Worm. Close to 70 Percent Affected in Koniboua"]

> [Text] The guinea worm or Medina filaria is ravaging many villages in the Lakota department.
>
> From Koniboua through Grogouya to Tanolilie, the guinea worm is threatening hundreds of people.

At Koniboua, a village 35 km of Gagnoa and 18 km of Lakota, over 100 people are affected, which poses a serious threat to the village economy.

In the villages of Gagnoa, Guiberoua and Ouragahio, over 30,000 people are threatened by the disease.

While things are getting better in the region of Gagnoa, thanks to government and certain embassies' assistance, in Lakota, on the other hand, the situation is very bad. At Koniboua for instance, a village of 150 inhabitants, 100 persons are affected: the only well was out of order for 15 days and the women had to fetch water from the marigots, where the guinea worm lives.

With all due respect to the villagers who believe that the disease is caused by an evil sorcerer.

We left Gagnoa Monday 6 September at 10:00 with two agents of the decontamination and hygiene department, and arrived at Koniboua 40 minutes later. As soon as we got out of the car the patients--at least those who could walk on a stick--came to us and accepted to discuss their affliction with us.

Mrs Logbre Dogbre: "I have been paralyzed by the guinea worm for over 5 months," she said. "The first victims of my condition are my children who go hungry."

Then, there is that schoolboy whose name had been put forward for admission to the CM1 [expansion unknown] for the next school year and who, a few days before school starts, is wondering whether he can make it. For Dacoury Gnable Fulgence, 13, has been affected by the guinea worm since May and as of now it is not sure that he can go back to school in October.

An Uncertain Future

"Last year," he said, "I ranked 3rd, 13th and 6th respectively on the quarterly tests, which would enable me to go to CM1. But now that my foot is affected, I am worried about the future." Concern about his case is all the greater as the school he is going to is about 5 km from where he lives.

Since May, certain farmers affected by the guinea worm have had to abandon their fields, which is going to have repercussions on the Koniboua village economy. With the school year about to start, the men are panicking. Handicapped by the disease, they do not see how they could fulfil their obligations as students' parents.

The women, usually so active at the side of their husbands, have not been spared by the disease. Like Mrs Logbre Dogbre, Mrs Zirizhon Rosalie has been paralyzed for 5 months: "For the past 5 months, I have had to stay in the village, unable to attend to my daily occupations."

These are distressing accounts from Koniboua, where the guinea worm is threatening a whole village.

After Koniboua, Tamolilie and Grogouya, the rural health technicians went to Lakota where the central subprefect, Mr Sylla Mamadou, and the general secretary of the PDCI-RDA [Democratic Party of the Ivory Coast-African Democratic Rally] section informed them of the situation.

According to the subprefect, the government should give top priority to controlling the guinea worm which acts as a brake upon the development of the region.

Quoting the example of smallpox (which has completely disappeared), the subprefect expressed the wish that concrete and efficient operations be organized quickly by the Ministry of Health in order to eradicate the disease once and for all.

The ministry should take drastic measures and provide the nurses with the means (drugs) to avoid a possible epidemic in other villages, like the 1980 epidemic in Olibribouo, in the Gagnoa region, when over 317 people were affected.

Fixing Streams

Abidjan FRATERNITE MATIN in French 15 Sep 82 p 10

[Interview with Mr Alexandre Dike of the Rural Health Sector Hygiene and Decontamination Department: "Guinea Worm: To Control the Disease, Streams Must Be Fixed"; date and place not specified]

> [Text] "To control the guinea worm, we must fix the springs where the villagers must drink when the drilled well is out of order."
>
> This statement by Mr Alexandre Dike of the Rural Health Sector Hygiene and Decontamination Department indicate clearly what must be done to eradicate the guinea worm from our villages.

In spite of the unflagging efforts of this young technician who, with his colleague, Mr Georges Chiapo, goes back and forth through three departments, Gagnoa, Lakota and Oume, the guinea worm still prevails. And drugs won't do the job.

Until the Ministry of Health makes additional means available to the Hygiene and Decontamination Department, what must be done, according to Mr G. Arthur Brown, UN Development Program assistant manager, is to develop an effective and permanent system to protect and maintain water-supply sources, so the people should not have to stand or wade in them when they fetch water, and to organize programs to educate the people as to the causes and prevention of the disease which causes open wounds, serious troubles and work disabilities.

Mr Alexandre Dike is now answering our questions on the measures which have been or could be taken to control this plague.

[Question] Mr Dike Alexandre, what is your role as a decontamination agent in a Rural Health Sector?

[Answer] I am in charge of the decontamination section which takes care of tropical diseases: guinea worm, bilharziasis and others. I have to organize awareness campaigns in the villages to eradicate these diseases which are commonly called "ignorance diseases."

A Challenge That Must Be Met

Our first task is to control the guinea worm because it is the number one plague and is acute in the Gagnoa region. This is a challenge that must be met at all costs to enable the villages involved to drink clean water.

[Question] What is the situation like?

[Answer] The disease prevails in the three departments of Gagnoa, Lakota and Oume. Here are recent statistics: in the central Gagnoa subprefecture, over 9,000 people are exposed to the disease. At Guiberoua, the life of 3,500 is in danger and at Ouragahio 13,000 are threatened. Villages like Tehiri, Zigbohouri, Koniboua and Gnakpalilie are very much affected.

In view of our meagre resources, we cannot work in all villages at the same time. At present, we are working at Ouragahio and we hope that in a year from now the guinea worm will be only a memory there.

The U.S. Embassy has just financed a program to fix all the springs that carry the guinea worm.

This an "ignorance disease," and to get rid of it we negotiate with the people who still believe that the disease is caused by someone, by sorcerers that spread it around. Fortunately, we have our analyses to show them that the disease is transmitted by unclean water.

Still, we do have hope for, in certain villages where the spring have not yet been fixed, the people will drink water from the well, even if it turns red at times or if it has a bad smell. Or else, if they prefer spring water, they try to filter it using the techniques we taught them.

[Question] How does the guinea worm propagate itself?

[Answer] Not all springs or marigots contain the guinea worm. But when a man or woman carrying the guinea worm goes through the village and wades in the spring or marigot, the water is immediately contaminated and becomes very much infected.

An Insufficient Number of Wells

[Question] Do the wells drilled by FOREXI [Company for Conducting Exploratory Drilling in the Ivory Coast] contain guinea worms?

[Answer] No, they don't. And we do advise the villagers to drink their water. But there is a problem: in our area, one well has been drilled for every 600 inhabitants; that is not enough. At peak hours, the women must wait too long, they lose patience. Or then, the pump--which is used all the time and not always correctly--breaks down and until it is repaired they go back to the springs for water...

[Question] What advice would you give to spring-water users?

[Answer] When there is no modern pump or well, they have no choice. We advise them to hire a well-digger to dig an artisanal well.

We also show them how to filter water using a sand or cloth filter, which is already an effective way of controlling the guinea worm. We also encourage them to boil the water, let it stand and skim the surface to obtain good-quality drinking water.

[Question] Are the means now available sufficient to obtain good results?

[Answer] The best way to control that plague is to fix all springs. We must stress prevention. Therefore, means should be made available, without waiting for an epidemic like the 1981 epidemic in Olibribouo.

Prevention The Only Remedy

Abidjan FRATERNITE MATIN in French 15 Sep 82 p 10

[Article by Jean-Baptiste Akrou: "Prevention Remains the Only Remedy"]

[Text] The guinea worm is a non-fatal, painful and disabling disease against which there is, properly speaking, no effective remedy. The patients recover almost on their own. The real solution resides in prevention. Roughly, this summarizes the interview which Dr Jean Rive, technical advisor at the Ministry of Health, gave us last Monday to shed more light on the guinea worm situation in our country.

The disease exists all over the territory but the largest centers of infection are in the center, the north and the northeast. The guinea worm is essentially endemic in the savanna. In view of this, the cases of Gagnoa, Lakota, Ouragahio and Guiberoua, all towns located in the forest, are paradoxical. Statistics show 1,756 cases in 1980 in the Gagnoa rural health sector, against 1,615 in 1979. These figures reflect only the cases on record. Now, according to OCCGE [Organization for Coordination and Cooperation in the Control of Major Endemic Diseases in West Africa] estimates, usually only 10 percent of the patients are reported. In other words, there were some 16,150 people affected by the disease in this area in 1979, and 17,560 in 1980.

Only Ten Percent of Cases Are Reported

Nationally, 5,000 to 8,000 cases were reported during 1971-1979, i.e. an average of 6,500 reported cases per year, representing 65,000 people actually affected. What can we do to eradicate that plague? According to Mr Rive, once a person is affected, there is almost no effective remedy. Therefore, prevention through the development of village water-supplies should be used to control the guinea worm. Ideally, we should drill a sufficient number of wells as figures show that in Dimbokro the drilling of wells reduced contamination from 30 to 1 percent. Since we do not have wells everywhere, the Ministry of Public Health, through the National Health Education Service, is trying to teach social hygiene to rural populations. Jointly with the Central Water-Supply Directorate, the Ministry of Health is undertaking a program to fix the village springs and watering places.

Efforts are made to educate the rural populations and to teach them how to filter their drinking water, to prevent marigot pollution. As Mr Jean Rive said, "the guinea worm is the easiest disease to eradicate. It is a matter of primary health care. If we cannot get rid of it, we would be kidding ourselves if we thought of getting rid of the others. Just filter the water with a piece of white cloth and the disease is gone." This simple effort is unfortunately little understood by rural populations. They go to the community clinic for a slight fever or an attack of malaria, but never for the guinea worm. Now, an attack of malaria will make you lose 3 days as a rule; the guinea worm without complication will make you lose 14 days, 30 with complications. Since 28 April, the WHO and the United States have given their agreement to a control program in the African countries affected by the disease. There may be hope from that side.

9294
CSO: 5400/1

DENGUE EPIDEMIC CONTINUES IN WEST, EAST MALAYSIA

Over 30 New Cases

Kuala Lumpur NEW STRAITS TIMES in English 15 Sep 82 p 11

[Text]

KUALA LUMPUR, Tues. — Thirty-two more dengue cases were reported today, bringing the number of cases to 2,670.

A Health Ministry spokesman said today six of the new cases were dengue haemorrhagic fever.

Of the total, seven were reported in Penang, six in the Federal Territory, four in Sarawak, three each in Selangor and Negri Sembilan, two each in Kelantan, Pahang and Trengganu, and one each in Kedah, Johore and Perak.

No new cases were reported in Malacca, Sabah and Perlis. The death toll remains at 33.

In **Penang**, seven dengue fever and one dengue haemorrhagic faver cases were reported in the State within the last 24 hours.

A spokesman for the State Medical and Health Department said four of the cases were reported in Seberang Perai, two each in Bukit Mertajam, Butterworth and Ayer Itam, and one in George Town.

To date, 423 cases had been reported in the State.

In **Johore**, one more dengue fever case was reported in the past 24 hours, bringing the total number of suspected cases in the State to 165.

In Pahang, two more dengue cases were reported in the last 24 hours, a State Medical and Health Department spokesman said in Kuantan.

Cholera Reported in Sabah

Kuala Belait BORNEO BULLETIN in English 11 Sep 82 pp 1, 2

[Excerpts]

KUCHING. — Beware Aedes!

That's the message of a nation-wide anti-dengue fever campaign which was given some teeth in Sarawak late last month with the introduction of a new law.

Now people who allow Aedes mosquitoes to breed on their property not only run the risk of infection by the potentially fatal disease, but they can be slapped with on-the-spot fines of up to $100.

Sarawak authorities hope introduction of the law will prompt all property owners to co-operate in the fight against dengue fever.

It is continuing to spread at an alarming rate, with 18 new cases being reported during the seven days to Monday this week to bring the total for the year to 85. There has been one death.

There have been a few cases around Sibu, but most have been in the Kuching District.

Although Sabah reported no new dengue cases during the week to last Saturday, alarm over the threat remains high.

The State Action Committee, which consists of top civil servants and political leaders, last Sunday expressed concern over the lack of "Abate" which is added to water to kill Aedes.

Only limited quantities have been received from Kuala Lumpur.

(Newspaper reports indicate Abate is in short supply throughout Malaysia, with supplies in some shops being snapped up within hours of arrival.)

Deputy Chief Minister Datuk James Ongkili, who chaired the committee meeting, called on the federal government to consider distributing Abate free to the public.

Of more immediate concern to the committee was the way cholera has continued to fester in Sabah; by the end of last month, more than 320 cases had been detected with about a dozen deaths.

The state Director of Medical and Health Services, Dr Mechiel Chan, said most of the state's cholera victims have been Filipino refugees in Sandakan, who were highly susceptible because of their poor living conditions.

Sandakan District Officer Encik Masidi Manjun told the committee that the number of unknown cholera deaths among the refugees could be "monumental."

He added that most refugees had a "couldn't-care-less" attitude to the cholera threat and refused to co-operate with Medical Department officers trying to improve the situation in their areas.

To help deal with the problem, Datuk Ongkili directed the Refugees Resettlement Department to establish committees composed of refugees to help the government carry out its policies.

These committees are to be patterned after the Kampung Development and Security Committees (JKKKs) set up in villages in the state.

The Medical, Labour and Immigration Departments are to also co-operate in anti-cholera efforts among foreign workers on estates and in timber camps.

CSO: 5400/8403

PLAN DRAFTED TO BLOCK TUBERCULOSIS EPIDEMIC

Port Louis L'EXPRESS in French 17 Aug 82 pp 1, 6

[Text] A plan of action was drafted yesterday to elimiante the beginnings of a tuberculosis epidemic which has apparently infected some 150 of the 500 head of cattle being raised in Constance.

These decisions were made at the Ministry of Agriculture during a working session at which the interim permanent secretary, R. Hurdowar, presided. The meeting was attended by technicians from the veterinary department of the ministry, the Mauritius Meat Producers Association (MMPA) and a representative of the establishment in Constance.

As an initial step, 5 of the 153 animals on which tuberculosis tests yielded positive infection results will be slaughtered at the central slaughterhouse, taking all necessary precautions, so as to establish if the animals were indeed infected. If 3 or more are in fact suffering from tuberculosis, the 153 animals which reacted positively to the tuberculin test will then have to be slaughtered, and the infected portions of these animals which might transmit the disease to consumers would be destroyed.

If three or fewer of these first five animals are in fact sick, the others will be placed in a pasture area in complete isolation from the rest of the herd, and will be subjected to other tests for a month and a half before any decision is made. Subsequently, all the infected animals would definitely be slaughtered.

However, if 3 or more of these 5 first animals are infected, the fate of the 347 others will have to be decided.

Obviously, all the necessary precautions will also be assured in order to prevent the center of infection from spreading.

Constance has one of the large cattle raising undertakings in the country, and the slaughtering of its 500 animals would mean a direct loss of about 4 million rupees to the establishment, exclusive of the long-term loss and the discouragement of livestock breeders, for whom the establishment of such a herd has meant an intensive effort.

When questioned on this subject by a reporter from L'EXPRESS yesterday, the president of the Mauritius Meat Producers Association, Marc de Maroussem, confirmed the report. The livestock breeder involved is one of the 16 members of the MMPA.

"this is a very serious problem," Mr de Maroussem stressed. "In the past, the government veterinary departments were required to make tests for each livestock breeder annually. But 3 years ago, the government asked the livestock breeders to acquire test kits first of all, after which the government would supply the tuberculin and have it administered by its own veterinarians. But because of difficulties in transporting the veterinarians, no further tests were administered. Soon the MMPA had to import the doses of tuberculin itself, representing an exception to the procedure. These doses were received 6 weeks ago and a veterinarian was made available to the livestock breeders to administer the tests finally, and it was last week that the disease was detected in the animals of one breeder."

We should note that despite the recent criticisms of the government where diversification and livestock breeding by the private sector are concerned, the breeders, despite the constraints imposed by the former government, succeeded in increasing their herd by about 42 percent in 5 years' time, increasing the herds to a total of 10,000 head.

The animals of the other livestock breeders are currently being tested, and no further case of infection has been reported to the MMPA as yet.

5157
CSO: 5400/5764

COMPLAINT OF INACTION AGAINST DENGUE IN PICHUCALCO

Tuxtla Gutierrez LA VOZ DEL SURESTE in Spanish 20 Aug 82 p 2

[Text] Pichucalco, Chis--The Aedes aegypti mosquito, transmitter of dengue, has appeared in this town, causing great alarm among the citizenry, since the cases that have been ascertained up to now have involved vomiting, high fever, itching, hemorrhaging, and intense body pains.

The epidemic, which has been increasing day by day, has not received the attention of the health authorities. The latter have not started any campaign to combat the mosquito, nor given the people any help on how to counter the disease.

Of course the people are afraid that the disease will spread. Therefore we believe that it is imperative that the coordinated services of the Public Health Department and of other health institutions immediately cooperate in giving basic assistance to those in need.

In addition, there is the situation of streets that have turned into veritable streams of dark water, since drains have become obstructed from the fall-out of the ashes from Chichonal. The municipal authorities have not done anything to remedy this harmful situation.

The popular consensus is that the appearance of dengue is due to the dark water that runs through the above mentioned streets. It is claimed that the responsibility for this falls on Manuel Carballa Bastor, mayor of the town who, instead of looking after the safety and health of the people, devotes himself to other activities that are far removed from his duty as the foremost municipal authority.

Of course Manuel will soon leave his post and his trust, because the people who supposedly voted for him continue to suffer the consequences of the whims of our highest governmental authorities. I hope that now, in making a new decision, the choice will be for someone who will serve the citizenry and not take advantage of them.

8255
CSO: 5400/2218

BRIEFS

CHIAPAS ANTI-DENGUE MEASURES--Tuxtla Gutierrez, Chis.--The Secretariat of Health and Assistance is conducting an emergency program in the entire area for the purpose of combating the aegypti mosquito that is the main transmitter of dengue. That is what was reported by Dr Bruno Salvador Sanchez B., chief of the state Office of Epidemiology of the Public Health Coordinated Services, after being interviewed in his office. The physician said that the above mentioned program began in July and will end in December of this year. The program consists of applying insecticides to containers, such as tanks, tambos, etc., in private homes. Then he explained that the insecticides that are being used are not harmful to humans and that therefore there is nothing to fear in this respect. This work, begun by the SSA [Secretariat of Health and Assistance], is duly supported by the municipal governments of the state, which furnish the means for the above mentioned fumigations. Up to now residences in the following towns have been fumigated: Berriozabal, Chiapa de Corzo, Tapachula, Huixtla, Ciudad Hidalgo, Tuxtla Chico, Mazatan, Huehuetan, Mapastepec, Pijijiapan, and Tuxtla Gutierrez. Our interviewee concluded that this action has given excellent results, since it is checking the dengue epidemic and hemorrhagic fever caused by the aegypti mosquito that abounds in ponds and water containers. [Text by Abenamar Moreno S.] [Tuxtla Gutierrez LA VOZ DEL SURESTE in Spanish 20 Aug 82 p 8] 8255

ZIHUATANEJO DENGUE CASES--Zihuatanejo, Gro., 21 September--About 1,000 persons in this port are suffering from dengue as a result of an increasingly unhealthy situation, reported Dr Isidro Olivares Morales, director of the Health Center. He said that the epidemic would increase in this city as long as there is no campaign against the transmitter mosquito of this disease. He added that in this port there are many lots containing refuse. In addition, in several of the poor settlements there are undrained [terraceria] streets, which has caused an increase in mosquitos. He said that it is urgently necessary for municipal and state authorities to cooperate in combating the dengue epidemic. [Text by Amador Sanchez M., EXCELSIOR correspondent] [Mexico City EXCELSIOR in Spanish 12 Sep 82 p 32-A] 8255

CSO: 5400/2218

ENCEPHALITIS IN BIRATNAGAR

Kathmandu THE RISING NEPAL in English 5 Sep 82 p 3

[Text] Biratnagar, (RSS):

Encephalitis which has already killed people in the past two weeks seems to have broken out here.

About a dozen people suffering from encephalitis have been admitted to local zonal hospital for treatment.

According to Biratnagar town panchayat, Laxmi Sahani, 30, (female), nine years old boy Jogendra and two years old Anju Kumari (female) are among the four persons who died of the disease in the town panchayat.

The hospital did not disclose the names of two other persons who had died of the Disease.

The hospital authority concerned even declined to furnish details of patients admitted to the hospital for the treatment of the disease.

According to the information made available by the hospital to the town panchayat about the number of patients who visited the hospital for treatment of the disease has been more than fifteen.

According to informed sources, patients suffering from the disease have been reporting to hospital for treatment everyday.

In the meanwhile, teams of the Biratnagar town panchayat and local office of Malaria eradication organisation have despatched teams to spray anti-mosquitoes drugs. Mosquitoes are the carriers of the germs of the disease which is more often than not is fatal.

The town panchayat administration said that the drive to spray anti-mosquitoes drive will continue upto the last of the second week of this month. Under the drive, the adult mosquitoes will be killed and then the efforts will be concentrated on killing the larva.

The town panchayat has also appealed for the cooperation of the town people for their cooperation in its effort to control the disease. It has also distributed pamphlets alerting the people against the disease.

CSO: 5400/4300

BRIEFS

ENCEPHALITIS IN TERAI--Nine persons have died of encephalitis in different parts of Terai districts of the country, it is authoritatively learnt here. According to Zoonosis Section of the Department of Health Services, so far 51 persons in Jhapa, Sunsari, Morang, Dhanusha, Bara, Parsa and Baken districts including inner Terai area of Sindhuli are known to be suffering from encephalitis. They are being treated at different hospitals. [Text] [Kathmandu THE MOTHERLAND in English 9 Sep 82 p 2]

ENCEPHALITIS IN UDAIPUR DISTRICT--Encephalitis has claimed 14 more lives in several wards of Risku village panchayat of Udaipur. The endemic disease is dreaded as it is frequently fatal. Although the exact toll is not known, quite a few people have either succumbed to or been attacked by the disease in various parts of the country. As its incidence is on the increase, Udaipur district panchayat has reportedly launched measures to control it. Apart from a chemical spraying programme it has set up a fund of Rs. 2000/- to buy necessary medicine for the afflicted. [Text] [Kathmandu THE RISING NEPAL in English 17 Sep 82 p 18]

CSO: 5400/4300

BRIEFS

RABIES CASES REPORTED--Hospital Unit No 3 reported yesterday that there have been 50 cases of rabies in the districts of La Victoria and El Agustino, and that six persons have died of rabies thus far. A spokesman for Hospital Unit No 3 stated that an innoculation campaign will be launched at the beginning of September and that an operation will be carried out in those districts today and tomorrow to eliminate stray dogs. [PY010049 Lima EXPRESO in Spanish 19 Aug 82 p 8]

RABIES CASES IN LIMA--The Anti-Rabies Center in Lima last week detected 18 cases of rabies, and reported the death of one child. The center reported that there have been a total of 641 cases of rabies so far this year. [PY232345 Lima EXPRESO in Spanish 5 Sep 82 p 4]

CSO: 5400/2003

BRIEFS

MALARIA OUTBREAK--Garchitorena, Camarines Sur, 1 Oct--Eleven persons, including a seven-year-old schoolboy, died, while 20 others were seriously stricken by malaria which threatened hundreds of residents of six island barangays of this town for the last five days. Mayor Pedro Arcilla said that 30 more persons are confined at the Binagasbasan elementary school which has served as a temporary dehydration center for malaria victims since September 26. Arcilla had appealed for help from health authorities in Manila. But so far, only a three-man team from the Ministry of Health's malaria control office and a few doctors have been dispatched to the town. The major said foodstuffs for the victims and medicine for others who did not want to be taken to the dehydration center and ministry teams to control the disease are badly needed. Arcilla said doctors sent to the afflicted areas have identified the malarial disease as Plasmodium Falciparum, also known as Cerebral Marpt malaria. The afflicted island barangays are Tamiawon, Dangla, Kagamutan, Bahi Binagasbasan and Sumaoy. [Excerpts] [HK040522 Manila BULLETIN TODAY in English 2 Oct 82 pp 1, 8]

CSO: 5400/4306

BRIEFS

GROWING THREAT OF TB--The South African Department of Health and Welfare is currently spending about R4-million a year on the control of tuberculosis, the TB problem is 17 times greater in South Africa than in Canada. And in its 1981/82 annual report, the South African National Tuberculosis Association (Santa), the major organisation fighting the disease admits that SA expenditure to combat the disease was "substantially less" than in Canada. The report says that for many decades, TB has remained the major disease in SA. About 9,713 of the 138,863 cases of notifiable disease in SA for the first four months of 1982, were cases of TB; next came 1200 cases of measles, followed by 964 cases of cholera. "When one considers furthermore that it is known that at least two thirds of the infectious TB cases are not discovered, one if faced with the startling fact that there are 150,000 new cases of TB each year," the report reveals. One of the greatest contributory factors is the socio-economic conditions of poor housing, where malnutrition and excessive stress and strain is prominent. There lurks the killer disease. While some reduction has been recorded in the prevalance of TB, about 2 percent per annum, little headway will be made until more effort, backed by adequate long term-funding, is concentrated on prevention control. The reduction does not even compensate for the increase in population. [Text] [Johannesburg SOWETAN in English 1 Oct 82 p 8]

CSO: 5400/7

LEPROSY SPREADS IN SOUTH

Bangkok DAO SIAM in Thai 30 Jun 82 pp 3, 12

[Article: "Public Health Alarmed By Spread of Leprosy In Phuket"]

[Text] A doctor has said that a survey has shown that, at present, Phuket Province has the largest number of lepers in the country, especially among the fishermen. The Ministry of Public Health has mobilized people to control things. It is expected that the situation will improve within 5 years.

Dr Thira Rammasut, the director of the Leprosy Control Division, Communicable Disease Control Department, told reporters that the 1981 survey of the number of lepers showed that there were more lepers in Phuket Province than in any other province in Thailand. There were about 400 cases there, or about five cases per 1,000 people. And the disease is spreading. It is felt that this is a great public health problem. Most of the lepers are fishermen. The reason for the spread of this disease is that Phuket Province is a small island with a high population density, resistance to the disease is low and, in particular, the fishermen have habits that differ from those of southerners in general. That is, they work as fishermen and do not bathe regularly or keep their bodies clean. This is the reason why leprosy has spread among this group. And this is an important pocket for the spread of this disease.

Thus, the Communicable Disease Control Department has quickly mobilized various resources to help the province control this disease more efficiently. It is expected that, within the next 5 years, it will be possible to reduce the number of cases of leprosy.

Concerning whether this will be a problem for tourism since Phuket is one of Thailand's important tourist attractions, Dr Thira said that this would not cause any problems. And he asked people not to become alarmed because the people afflicted with this disease are all fishermen. And it is very difficult to transmit this disease to another person.

As for other southern provinces, the director of the Leprosy Control Division said that there is not much of a problem. The number of lepers in these provinces

is very small. But there is a control problem because of the customs and culture of the southern people, particularly the Moslims. These people hate lepers even though it is very difficult to transmit this disease to others. Thus, there is a problem in controlling this disease. At the same time, some areas in the southern region are in dangerous zones and so it is difficult to go carry on activities in these areas.

Dr Thira said that, at present, there are still 14 provinces that have a leprosy problem, that is, they have a leprosy rate of more than 1 case per 1,000 people. The World Health Organization feels that if the rate exceeds this level, there is a public health problem. The 14 provinces are Maha Sarakham, Kalasin, Roi Et, Surin, Buriram, Khon Kaen, Uthai Thani, Nakhon Sawan, Phuket, Sisaket, Nakhon Ratchasima, Chaiyaphum, Ubon Ratchathani and Saraburi. For these provinces, the goal of the Ministry of Public Health is to reduce the rate of leprosy to less than 1 case per 1,000 people within the next 5 years.

11943
CSO: 5400/5776

RECORD OF LEPROSY TREATMENT NOTED

Bangkok DAO SIAM in Thai 19 Aug 82 pp 3, 12

[Article: "Survey Finds That More Than 100,000 People Have Leprosy"]

[Text] Dr Nitda Siriphai, the director-general of the Communicable Disease Control Department, said that during the past 20 years in which Thailand has worked to control leprosy, almost 65,000 people have been treated and another 45,000 people have registered for treatment.

The director-general of the Communicable Disease Control Department sent this report to Dr Sem Phringphawongkaeo, the minister of public health, who presided at the opening of a national seminar on "Controlling Leprosy In Thailand." The Communicalbe Disease Control Department has received financial support from the Sasakawa Foundation.

Dr Nitda said that steps to control leprosy in Thailand were first taken in 1955. To date, a total of 113,146 poeple found to have leprosy have been treated. Of this number, 64,623 received continuous treatment and are now cured of the disease. Another 45,000 are still undergoing treatment. Of these, 4,500 are being treated at hospitals and medical centers and at leprosy settlements and vilages set up by the government and private sectors. The others continue to live at home while undergoing treatment.

As for this seminar, 132 pecple from the sectors concerned attended the seminar. The Sasakawa Soundation sent Dr Yo Tuasa, the administrative and medical director of the foundation, to attend the seminar. Dr D.S. Sikat, the representative for the Coordinator's Office and the World Health Organization in Thailand, also attended and spoke at the seminar. The seminar lasted until 18 August.

11943
CSO: 5400/5776

TRICHINOSIS SPREADS IN NORTH

Bangkok SIAM RAT in Thai 29 Jul 82 p 5

[Article: "Trichinosis Spreads From Meat to Humans; Death [May] Occur"]

[Text] Veterinarian Wara Misombun, the head of the human-animal communicable diseases control section, Communicable Disease Control Division, Communicalbe Disease Control Department, stated that, at present, there is an outbreak of trichinosis in Thailand, especially in the northern region. Trichinosis is caused by a parasite that can be transmitted form animal to man by consumption of meat containing Trichinella spiralis, which invade the muscles of various animals such as hill tribe hogs, wild boars, black bears, wild dogs, forest squirrels and pigs that live in hill tribe areas. Once this parasite enters a human body, it penetrates the intestional wall, mates and discharges larvae, which then invade various organs of the body.

As for symptoms, about 1 week after a person has been infected with this parasite by eating meat containing the parasite, he will have diarrhea. This is the period during which the parasite mates and discharges larvae. Following this, facial edema and edema of the eyelids appears. This is because the young larvae invade this [part of the body]. This is a very dangerous period and the person can even die because the parasite invades various organs of the body, including the heart. This may cause heart failure. This period lasts for about 2 months after ingestion of the parasite.

Veterinarian Wara also said that if the person survives the first 2 months, he will still suffer pain and will not be able to move by himself.Someone else must constantly help him to move about, sit up and lay down. And his condition will not improve rapidly.

Veterinarian Wara said that since 1962, there have been 53 epidemics with a total of 2,570 people [coming down with trichinosis]; 87 people have died. Trichinosis has occurred most frequently in Chiang Rai Province. There have been 20 epidemics there with 774 cases and 14 deaths. Other provinces where this disease occurs frequently include Chiang Mai, Nan and Kamphaengphet. Usually, the disease spreads in sub-municipal areas because the hog slaughtering houses in the sub-municipal areas do not check the animals before they are

slaughtered. Thus, merchants often buy hill tribe hogs for slaughter from areas where the parasite is prevalent since these hogs are cheap. Thus, people who purchase the pork and eat raw "lap" [minced meat] or improperly cured ham become sick.

As for suggestions on how to keep from coming down with this disease, people should not eat raw meat. Meat should be cooked well before it is eaten. Ham should be cured 7-8 days before it is eaten. However, the sad thing is that it is not possible to change the eating habits of the people in the north, who are in the habit of eating raw meat.

11943
CSO: 5400/5776

BRIEFS

MEASLES DEATHS, VACCINATION CAMPAIGN--A team of medical officers has been dispatched to Chamuka's area in Kalomo district to vaccinate children against measles which has claimed the lives of 12 children. A spokesman from the provincial medical officer's office said in Livingstone that the medical officers were already in the affected areas vaccinating children. The spokesman said an intensive vaccination campaign has been launched to eradicate the killer disease. The death of the children from Chamuka, Chongolo and Chinkuli's areas came to light last week when Party officials told Central Committee Member for Southern Province, Mr Mungoni Liso that there was an outbreak of the killer disease. Chamuka Ward chairman, Mr Jonathan Singombe had told Mr Liso the 12 children died within the week and this had led to panic among villagers. [Text] [Lusaka DAILY MAIL in English 6 Oct 82 p 5]

SCHISTOSOMIASIS OUTBREAK IN KALOMO--Medical authorities are to investigate reports of an outbreak of bilharzia among primary school children in Kalomo district, said Southern Province medical officer Dr Satya Prakash. Dr Prakash was reacting to reports that more than 400 primary school pupils were suffering from bilharzia. Headteachers of Masempela and Dimbwe primary schools in Kalomo informed provincial Member of the Central Committee Mr Mungoni Liso on Tuesday that most pupils missed lessons because they trekked long distances for treatment. Masempela headteacher Mr Haggai Mwana said the outbreak had affected the performance of pupils as only three were selected for Form One. More than 200 out of 305 pupils at the school had the disease and travelled to Choma for treatment. Dimbwe headteacher Mr Pay Sichundu told Mr Liso that out of 317 pupils at his school, more than 200 were afflicted. He said the rural health centre near the school had no drugs to treat the pupils and they had to be taken to Choma or Kalomo. Dr Prakash said in Livingstone there were plenty of drugs to treat the disease and for prevention as there were many other cases in the province. "We have full confidence that we will contain the disease wherever there is an outbreak." [Text] [Lusaka TIMES OF ZAMBIA in English 1 Oct 82 p 2]

CSO: 5400/16

BRIEFS

ANTHRAX EPIDEMIC IN NORTHEAST--The Department of Livestock Development has warned the people in the northeast to take precautions against anthrax, which is spreading in the north and northeast. Animals have died and people who have consumed the meat of infected animals have died.The people have been asked not to eat the meat of animals stricken with anthrax. Concerning this matter, the Department of Livestock Development has ordered provincial and district livestock development [officials] to give vaccinations against this disease in areas where the disease is prevalent and in the surrounding areas. Besides this, vaccinations have been given every year but anthrax epidemics have still broken out, particularly in the border provinces, where more people are smuggling in animals from abroad and selling them here. Sometimes, meat infected with this disease is brought in too and this gives rise to anthrax epidemics. [Excerpt] [Bangkok DAO SIAM in Thai 7 Jul 82 pp 3, 12] 11943

CSO: 5400/5776

MINISTRY FACING PROBLEMS IN CORRIDOR DISEASE ERADICATION

Lusaka DAILY MAIL in English 20 Sep 82 p 7

[Text]

THE Ministry of Agriculture and Water Development is facing problems in wiping out cattle diseases now rampant in some parts of the country because some of the animals affected have become immune to some vaccines and other medicines being used.

Permanent Secretary in the ministry, Mr Namukulo Mukutu said in Lusaka that this problem has been made worse by ignorance by some people on the proper methods used in dipping the animals.

"The Ministry of Agriculture is now concentrating on the control and possible eradication of corridor disease which is now rampant in the cattle areas of Southern Province especially Monze district.

"The main problem now is the fact that due to improper servicing of dipping materials for animals and lack of proper understanding of the use of these materials, the type of ticks that are responsible for the disease have become immune to the present materials being used," he said.

Mr Mukutu, who was commenting on the general situation regarding cattle disease facing the country and what measures the ministry was taking to combat the scourge, said his ministry was doing everything possible to control the situation.

The ignorance by some people on the correct ways of dipping their animals and the fact that some animals affected were now immune to the medicine being used were the "key factors in the current war against corridor disease by the ministry through its Department of Veterinary and Tsetse Control Services."

The ministry was now assessing as a matter of utmost urgency the efficacy of all the dipping materials being used in the country, he said.

Recently the ministry gave K27,000 on request from the Department of Veterinary and Tsetse Control and it is hoped that if the correct dipping material is found, it will control the corridor disease.

Mr Mukutu said the disease was now relatively contained but feared that with the on set of the rainy season soon, it may re-surface.

It was his hope however that by the start of the rainy season, the department would be geared enough to deal with the disease.

CSO: 3400/5

BRIEFS

NEWCASTLE DISEASE PREVENTION--The movement of chickens, ducks, turkeys and other birds had been restricted after results of samples taken from Masaiti where the Newcastle disease broke out two weeks ago. Last month residents complained about the loss of hundreds of chickens as a result of the disease. Dr Vladimir said his department has banned the movement of birds from the affected area. The department had taken this measure to control the disease. He advised poultry owners to buy vaccines from chemist shops for their birds. Farmers should maintain a high standard of hygiene to avoid attracting the disease. Cages used to carry birds to markets should be cleaned regularly and visitors should be kept away from the poultry area. Drinking water for the birds must be changed.

CSO: 5400/16

INCREASING RISK OF EXOTIC PLANT DISEASES, PESTS FORESEEN

Christchurch THE PRESS in English 27 Aug 82 p 23

[Text]

The jet age is reducing New Zealand's isolation and increasing the risk of the introduction of exotic plant pests and diseases, according to Mr J. D. Currie, the chief plant health advisor with the Ministry of Agriculture and Fisheries in Wellington.

Quarantine measures against exotic plant health risks is estimated to cost $4.5M each year and convincing justification for the quarantine was provided by just one family, the fruit flies, said Mr Currie.

An outbreak of fruit fly would have a similar effect on horticulture as foot and mouth disease would on livestock, Mr Currie told the annual convention of the New Zealand Institute of Agricultural Science in Dunedin.

Fruit flies were intercepted 364 times between 1955 and 1979 with the Mediterranean fruit fly (Medfly) occurring 26 times. The latest identification was in December at Auckland airport where pomegranates surrendered by a passenger travelling from Cyprus contained live larvae.

Medfly has about 300 hosts and if introduced to New Zealand would put paid to the horticultural diversification and expansion policy, said Mr Currie. Intensive protection spraying could reduce damage to 5-10 per cent but it would only be economic for high value crops if they could be sold.

Under normal spray programmes 30-50 per cent damage could be expected. In monetary terms it could mean an immediate loss in export earnings of $40M rising to $330M if the $1000M projection for horticulture exports is reached by 1990.

An outbreak of Medfly would cost at least $300,000 to control provided it was detected early.

"The expenditure of $4.5M on quarantine is brought into perspective by this one exotic threat."

The Japanese beetle (Papillia japonica) is equally adaptable to New Zealand's climate and could join the grass grub with larval attack on pastures before hatching into beetles to damage 250 different plants including most horticultural crops.

"Commonsense suggests that it may only be a matter of time before an outbreak of one of these serious exotics occurs."

Geographic isolation had favoured New Zealand by acting as a quarantine barrier and with few exotic pests and diseases New Zealand had an enviable trading advantage.

By keeping out exotics the production inputs for pests and disease control could be contained and horticultural diversification and output could be encouraged with confidence of assured market access.

New Zealand had taken the attitude that reasonable plant quarantine precautions are necessary.

Economic crops warranted strict protection against the introduction of known high-risk exotics and nursery stock in that category was restricted to very small quantities of promising new cultivars through the close quarantine system.

Most other planting material could be imported in quantities that could be kept in isolation and under visual inspection in open quarantine.

Although the system had inherent weakness, few if any pests or diseases had been introduced during the 25 years it has operated.

The real risks came with domestic rather than commercial imports, passengers and crew, through postage, hitch-hiking insects in farm machinery and by prevailing winds from Australia.

"While we can only make contingency plans for predictable wind-blown introductions, we can legislate and must enforce the quarantine barrier against the other known high risk sources."

The history of quarantine in New Zealand dates back to the Codling Moth Act 1884. With its failure, fruit growers have been faced with annual control expenses and the lucrative Japanese market remained closed.

Since then at least 50 economically significant exotic pests and diseases had become established, but many hundreds more were kept at bay by the quarantine screen.

Although the continuing challenge will be to prevent entry of pests and diseases, there was an equally important need for public awareness and reporting of all unusual insects and plants, said Mr Currie.

CSO: 5400/9091

BRIEFS

LOCUST SWARMS FROM INDIA--Two loose swarms of fresh locust adults measuring 6 and 4 square kilometer respectively infiltrated from India into Pakistan area of Khokrapar on Sept 19. According to Plant Protection Department immediate control measures were taken including aerial spraying of pesticides. It said several ground and aerial survey teams of the Department are keeping strict watch on the affected area. However, the field conditions were not suitable for further breeding of locust and, therefore there was no danger of any locust attack. Meanwhile, Food and Agriculture Organization (FAO) and Indian authorities have been informed about the latest locust situation, the Department sources said. They said FAO and Indian authorities have been requested to undertake thorough survey of the Indian border and supply advance information of any locust movement to enable Pakistani authorities to take timely control measures.--APP [Text] [Karachi MORNING NEWS in English 25 Sep 82 p 3]

END

CSO: 5400/4307